GOVERNOR

JAMES R. AIONA, JR. LT. GOVERNOR



KURT KAWAFUCHI DIRECTOR OF TAXATION

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STATE OF HAWAII DEPARTMENT OF TAXATION P.O. BOX 259 HONOLULU, HAWAII 96809

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# HOUSE COMMITTEE ON FINANCE

# TESTIMONY REGARDING SB 644 SD 3 HD 2 RELATING TO ENERGY RESOURCES

#### **\*\*\*WRITTEN TESTIMONY ONLY\*\*\***

# TESTIFIER: KURT KAWAFUCHI, DIRECTOR OF TAXATION (OR DESIGNEE)DATE:MARCH 26, 2008TIME:11:00AMROOM:308

This bill proposes to require the installation of solar water heating devices in all new residential construction and to increase the renewable energy income tax credit limits applicable to solar thermal energy systems installed and placed in service for either single family residential properties.

The Senate Committee on Energy & Environment amended the bill to eliminate the sunset of the solar thermal energy tax credit. The Committee also amended the bill to allow retrofitting and new construction to claim the credit. The increases in credit remain unchanged.

The Senate Committee on Economic Development & Taxation amended the purpose section of this bill and added a defective effective date.

The Senate Committee on Ways & Means amended the bill by expanding the credits to homes built before January 1, 2009; requiring the solar devices to be installed after January 1, 2009; increasing the credit amounts; and defecting the effective date.

The Senate passed this measure on third reading.

The House Committees on Human Services & Housing and Energy & Environmental Protection amended the tax component of this measure by precluding the tax credit from applying to new homes constructed after January 1, 2010.

The House Committee on Economic Development & Taxation amended the tax provision of this measure by modifying the type of construction that can qualify for the increased credit, as well as making modification by referring to a HECO standard.

Department of Taxation Testimony SB 644 SD 3 HD 2 March 26, 2008 Page 2 of 4

The Department of Taxation (Department) has concerns with the current draft.

This bill would not affect the renewable energy income tax credit limits applicable to windpowered energy systems or photovoltaic energy systems. This bill requires that the construction of every new residential single-family residence include the installation of a solar energy device to heat water beginning January 1, 2010.

**THE DEPARTMENT SUPPORTS RENEWABLE ENERGY EFFORTS**—The Department supports the goal of reducing the State's dependence on imported oil and requiring the installation of solar thermal water heaters on any new residential construction as a step in the right direction. This bill, as amended requires that solar water heating devices be installed on new construction after January 1, 2010.

**TECHNICAL CONCERNS**—The Department has concerns over the bill, as amended in its HD 2 version.

First, the Department has concerns over the language of the renewable energy credit as amended, and believes that the credit is confusing. Does the renewable energy credit for solar thermal installations for single-family dwellings apply only to "new" homes that are built? What is a "newly constructed" home? Must it be an entirely new structure? What about a remodel? The Department offers the language found below. As amended, the bill can be interpreted to eliminate the credit for any home already built prior to January 1, 2010. The Department requests that the ambiguity created by "newly constructed" be eliminated.

Second, the Department is concerned with the reference to a standard dictated by a private entity. The Department suggests that whatever standard is utilized by the tax credit, that the standard be placed into law or through an ascertainable standard dictated by the government and not private industry.

**REVENUE IMPACT**—This legislation will result in the following revenue impact:

- FY 2011 (gain): \$425,000
- FY 2012 and annually thereafter (loss): \$1.8 million

### Suggested HD 3

"(a) When the requirements of subsection (c) are met, each individual or corporate taxpayer that files an individual or corporate net income tax return for a taxable year may claim a tax credit under this section against the Hawaii state individual or corporate net income tax. The tax credit may be claimed for every eligible renewable energy technology system that is installed and placed in service in the [State] state by a taxpayer during the taxable year. This credit shall be available

Department of Taxation Testimony SB 644 SD 3 HD 2 March 26, 2008 Page 3 of 4

for systems installed and placed in service in the [State] state after June 30, 2003. The tax credit may be claimed as follows: Solar thermal energy systems [for:] installed in: (1)Single-family residential property: [thirty-five] (A) Twenty per cent of the actual cost or \$2,250, (i) whichever is less [+], for a residential structure not listed in (ii), [residence newly constructed as] the construction of which is authorized by a permit issued on or prior to January 1, 2010; and Fifteen per cent of the actual cost or \$2,250, (ii) whichever is less, for a [residence newly constructed as] residential structure, the construction of which is authorized by a permit issued after January 1, 2010; provided that at the time the system is installed and placed in service, Hawaiian Electric Company's solar water heater equipment, use, and installation standards program, including its 100-point rating scale for solar water heating units and rebate, applies to the system [THE DEPARTMENT SUGGESTS CODIFYING THIS STANDARD OR ELECTING A GOVERNMENT-MANDATED STANDARD AND NOT A STANDARD OF A PRIVATE COMPANY];

- (B) Multi-family residential property: thirty-five per cent of the actual cost or \$350 per unit, whichever is less; and
- (C) Commercial property: thirty-five per cent of the actual cost or \$250,000, whichever is less;
- (2) Wind-powered energy systems for:
  - (A) Single-family residential property: twenty per cent of the actual cost or \$1,500, whichever is less;
  - (B) Multi-family residential property: twenty per cent of the actual cost or \$200 per unit, whichever is less; and
  - (C) Commercial property: twenty per cent of the actual cost or \$500,000, whichever is less; and
- (3) Photovoltaic energy systems for:
  - (A) Single-family residential property: thirty-five per cent of the actual cost or \$5,000, whichever is less;
  - (B) Multi-family residential property: thirty-five per cent of the actual cost or \$350 per unit, whichever is less; and
  - (C) Commercial property: thirty-five per cent of the actual cost or \$500,000, whichever is less;

Department of Taxation Testimony SB 644 SD 3 HD 2 March 26, 2008 Page 4 of 4

provided that multiple owners of a single system shall be entitled to a single tax credit; and provided further that the tax credit shall be apportioned between the owners in proportion to their contribution to the cost of the system.

In the case of a partnership, S corporation, estate, or trust, the tax credit allowable is for every eligible renewable energy technology system that is installed and placed in service in the [State] state by the entity. The cost upon which the tax credit is computed shall be determined at the entity level. Distribution and share of credit shall be determined pursuant to section 235-110.7(a)."



# DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Web site: www.hawaii.gov/dbedt LINDA LINGLE GOVERNOR THEODORE E. LIU DIRECTOR MARK K. ANDERSON DEPUTY DIRECTOR

Telephone: (808) 586-2355 Fax: (808) 586-2377

Statement of **THEODORE E. LIU Director** Department of Business, Economic Development, and Tourism before the **HOUSE COMMITTEE ON FINANCE** Wednesday, March 26, 2008 11:00 a.m. State Capitol, Conference Room 308

# in consideration of SB 644, SD3, HD2 RELATING TO ENERGY RESOURCES.

Chair Oshiro, Vice Chair Lee, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports SB644, SD3, HD2, which requires solar water heaters on new, single-family, residential construction beginning January 1, 2010. Exemptions would be allowed. This bill also addresses the need for licensed installers, as well as written attestations by licensed professionals with regard to county building code requirements and solar system sizing.

This bill would also reduce, beginning on January 1, 2010, the tax credit percentage cap to 20% for systems installed on single-family dwellings "newly constructed" prior to January 1, 2010, and to 15% for those built after January 1, 2010.

This mandatory provision would support the energy objectives of the state by requiring the use of solar energy for water heating. The present combination of state tax credits, utility rebates, and renewable energy support have made Hawaii a leader in the use of solar energy. U.S. Department of Energy Deputy Assistant Secretary David Rodgers, who runs the nation's energy efficiency programs commented last week when he visited Hawaii in connection with the Hawaii Clean Energy Initiative, that with measures such as this, Hawaii could be held up as the model for the nation and other regions.

While we support this measure we wish to underscore the need to provide continued consumer confidence in terms of quality installations and proper sizing. We defer to the Department of Taxation on the tax impact of this bill.

We wish to convey our strong concern about the proposed reduction of the residential solar water heating tax credits. With the transition of utility efficiency and rebate programs to the Public Benefits Administrator, the future utility rebate programs are an unknown. Therefore, we believe that at this time it is important to maintain the stability of the energy tax credits. To reduce the tax credits may jeopardize the solar water heating market for existing facilities.

Finally, we wish to point out the interrelation between this measure and the state's renewable portfolio standard (RPS). The 2006 Legislature enacted the state's RPS, a critically important policy driver for development of more renewable energy generation. The RPS calls for the state's electricity to be 10% generated from renewable sources by 2010, 15% by 2015 and 20% by 2020. However, Hawaii's RPS is unique in that the definition of "renewable energy" includes not only traditional renewable resources, such as wind, solar, geothermal, hydro and ocean energy, but burning garbage (H-Power), energy efficiency, displacement (such as solar water heaters) and demand side management as well. It is our belief that this definition already dilutes the drive toward true renewable resource development. As the result, for 2006, under Hawaii's "hybrid RPS", the utilities show that they have achieved close to 14% renewable, the target to be achieved by 2014! Stripping out the non-traditional renewables, wind, solar, geothermal and hydro only make up 8%! Passing this measure will reduce the amount of fossil-SB0644SD3HD2\_BED\_03-26-08\_FIN\_TEST.doc

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fired electricity used for residential water heating, by making use of energy from the sun. This is a good thing.

However, this is not a shift by the electric utilities towards renewable energy sources. Therefore, it should not be counted as utility progress towards the renewable portfolio standard. Therefore, the renewable portfolio standards law should be revised to reflect the actual percentage of electricity generated from renewable resources, in order to build on efforts such as this.

Thank you for the opportunity to offer these comments.

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# TAXBILLSERVICE

126 Queen Street, Suite 304

TAX FOUNDATION OF HAWAII

Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: INCOME, Energy conservation tax credits

BILL NUMBER: SB 644, HD-2

INTRODUCED BY: House Committee on Economic Development and Business Concerns

BRIEF SUMMARY: Amends HRS section 235-12.5 to provide that the tax credit for solar thermal energy systems shall be 20% for a residence constructed prior to January 1, 2010 and 15% for a residence constructed after January 1, 2010 provided that at the time the system was installed and placed in service, Hawaiian Electric Company's solar water heater equipment, use, and installation standards program, including its 100-point rating scale for solar water heating units and rebates applied to the system.

Adds a new section to HRS chapter 196 to require solar thermal energy devices are to be installed on every new residential single-family residence, unless: (1) installation is impracticable due to poor solar resource; (2) installation is cost prohibitive; (3) a substitute renewable energy device is installed; or (4) a demand water heater is installed (a tankless, instantaneous water heater that provides hot water only as needed through the use of a gas burner), beginning with construction for which permits are issued after January 1, 2010.

# EFFECTIVE DATE: Upon approval

STAFF COMMENTS: Hawaii's income tax credit for alternate energy devices was established by the 1976 legislature originally for solar energy systems and was later expanded to include wind energy devices, heat pumps, ice storage systems, and photovoltaic systems. This system of credits was replaced a few years ago with tax credits focused solely on sources of energy that are renewable and not partially dependent on fossil fuel as are heat pumps and ice storage systems.

While some may consider incentives necessary to encourage the use of energy conservation devices, it should be noted that the high cost of these systems limits the benefit to those who have the initial capital to make the purchase. Recent interest in alternate energy is being driven by the high cost of fossil fuel used to generate energy and not by the credits. While the credits, state and federal, help ease the cost, it is the economic forces of the market that are driving consumers to explore alternate energy sources.

If it is the intent of the legislature to encourage a greater use of alternate energy devices and make a sincere effort to extend the opportunities to those at the lower end of the income scale, consideration should be given to a program of low-interest loans available to all income levels. One such program initiated by Act 240, SLH 2006, would allow consumers to pay-as-you-go, paying for these devices through the avoided costs of purchasing traditional energy resources. The Public Utilities Commission has been charged with implementing this pilot project.

This measure proposes to reduce the amount of the state energy tax credits for single family residential properties from 35% to: (1) 20% for those residences which obtained a permit prior to January 1, 2010; and (2) 15% for those residences for which a permit is issued after January 1, 2010. This measure would

#### SB 644, HD-2 - Continued

also require the installation of solar energy devices in new residential single-family construction beginning on January 1, 2010 unless such installation is impractical. This mandate will merely add to the up-front cost of new residential dwellings, making the purchase for first time home buyers even more of a challenge. Mandates beyond health and safety issues are unacceptable in a free market economy.

Further, what was learned in prior hearings is that because many times the developer of a new tract of homes does not know what the size of the family making that purchase will be, it is more than likely that the smallest and therefore the cheapest unit will be installed to meet the mandate. The rule of thumb is 20 gallons of hot water per day are needed for each person living in that residence. Perhaps the developer will assume that the family size will be four, but in the end the grandparents move-in with the family of four, necessitating a 120-gallon tank. This may mean reconstructing the storage area to accommodate the larger tank. As the cost of energy rises, alternate energy devices will, in themselves, become more popular and be viewed as an amenity desired by the prospective home buyer. Instead of a mandate, lawmakers should consider ways to encourage the accommodation of such devices, allowing the home buyer to make the choice of the device and appropriate size to serve the size of the family.

Finally, this draft of the bill attempts to utilize Hawaiian Electric's installation standards program; however, as drafted, it is not clear if the rebate must also be continued or if it is the current standards program that is used to qualify for the rebate. It would seem that if the installation is mandatory, then no rebate would be needed to provide an incentive.

Digested 3/25/08



# Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803 808.537.9019 hawaii.chapter@sierraclub.org

# HOUSE COMMITTEE ON FINANCE

March 26<sup>th</sup>, 2008, 11:00 A.M.

# (Testimony is 4 pages long)

# TESTIMONY IN SUPPORT OF SB 644 SD3 HD2 WITH AMENDMENTS

Chair Oshiro and members of the Finance Committee:

The Sierra Club, Hawai`i Chapter, with 5500 dues paying members statewide, strongly supports the intent of SB 644 SD3 HD2, mandating that new homes come equipped with solar water heaters where practical, but some critical changes need to be made to the measure to achieve its desired objectives. <u>Most importantly, we do not support the amendment made</u> by the previous committee to reduce the tax credit for solar installations on existing <u>homes.</u> We believe that the 35% tax credit should remain for these retrofits as it is today. Additionally, we offer some language (end of testimony) to ensure that only high quality systems are installed under this mandate.

This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. A solar water heater on each and every new home is absolutely essential to achieve our state's energy and greenhouse gas targets. Solar hot water should be a basic amenity in any new home in Hawai'i, just like indoor plumbing and electricity. Yet the majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. Senate Bill 644 offers a common-sense policy to require that developers have the long-term interest of new home buyers in mind. The following sections focus on the need for a solar water mandate.

# A full tank of gas lands on your roof every day

Hawai'i is blessed with substantial solar resource. The most populated parts of the state receive between 450 and 500 calories of solar radiation per square centimeter every day<sup>1</sup>. To put into perspective, an average rooftop space of 1100 square feet receives the energy equivalent of approximately 15 gallons of gasoline daily. We are the Saudi Arabia of sun. While some parts of Hawai'i receive less (some parts of Puna, for instance), there is still ample sun to keep water hot. This measure would put that hot energy to work, reducing fossil fuel use and the cost of living.

A solar water system is the most basic renewable energy device to harness the clean energy from the sun. The technology is mature, tested, and works. In fact, the Romans used solar energy to heat the water flowing to baths in aquaducts.

<sup>&</sup>lt;sup>1</sup> State of Hawai'i (2003). Hawaii Statewide GIS Program Solar Radiation Maps.

#### We must act today to stabilize carbon emissions

An overwhelming sense of urgency compels action on this and other substantial energy measures before the legislature. Given the rapid acceleration of climate destabilization, scientists are recently calling for near-zero carbon emissions within a matter of decades<sup>2</sup>. Solar water heating forms the foundation of reducing residential carbon emissions. Additionally, the cost of living has increased in Hawai'i due to the escalation of the global oil price. Since this measure was considered last year at this time, the price of oil has DOUBLED<sup>3</sup>. With 60,000 new homes planned for O'ahu alone over the next 20 years<sup>4</sup>, this measure is critically needed to ensure that we build them energy-smart and minimize the need for additional electricity demand. The first step toward zero-energy homes is the use of solar water heaters (the next step is to reduce electricity demand with efficient appliances and lighting, and the final step is to meet the remaining electricity demand with solar photovoltaic or other clean energy device).

New homes, of course, are only part of the picture—hundreds of thousands of existing housing units in Hawai'i need to be retrofit with solar water heaters as well. This measure wisely increases the current solar tax credit to increase the adoption of solar thermal for existing homes.

# Israel, Spain, and others mandate solar

While bold, this measure is not without precedent. Israel has mandated that all new homes in the country come equipped with solar water heaters and now they are standard on some 95% of homes. Since January, 2007, Spain has required solar water heaters on all new residential construction<sup>5</sup>. Here in Hawai'i, the Navy has been building all of its new residential units with solar thermal. In fact, the Army and Air Force are starting to build solar photovoltaic into some of its new residential units. This is construction performed by private contractors—the same type of contractors who would install solar for new civilian residential units. While passage of SB 644 would make Hawai'i the first state in the nation with such a requirement, solar mandates have been successfully used elsewhere to decrease energy costs and reduce fossil fuel use.

# Some 80% of Hawai'i homes lack solar, and the majority of new homes are built with electric hot water heaters installed

While Hawai'i leads the nation in the percentage of installed residential solar water heaters, some 80% of homes still lack this basic amenity. That means hundreds of thousands of housing units in Hawai'i rely on fossil fuel to keep their showers hot. Some local builders are starting to offer solar water heating as an option for new home buyers, but the majority of new homes built in Hawai'i do not use solar. Even with the established solar industry in Hawai'i and ample incentives, the most new homes are not converting to solar. A quick scan of Google Earth verifies this fact—particularly for developments in the fast-growing (and hot)

<sup>&</sup>lt;sup>2</sup> Matthews, H. D., and K. Caldeira (2008), Stabilizing climate requires near-zero emissions, *Geophysical Research Letters*, 35, L04705, 27 February 2008.

<sup>&</sup>lt;sup>3</sup> U.S. Energy Information Administration (2008), Short-Term Energy Outlook, 11 March 2008.

<sup>&</sup>lt;sup>4</sup> Gomes, Andrew(2006), 60,000 new homes planned for O'ahu, *Honolulu Advertiser*, 19 September 2006.

<sup>&</sup>lt;sup>5</sup> International Renewable Energy Alliance, http://www.ren-alliance.org, accessed 12 March 2008.

Ewa and Kapolei regions of O'ahu. Considering that we are adding around 5,000 new homes in Hawai'i annually, this measure would go a long way to reduce fossil fuel use and greenhouse gas emission.

# A solar mandate will dramatically reduce greenhouse gas emissions

Solar water heating is the single best "clean" energy alternative for residences in Hawai'i. A typical family home with solar water heating avoids over 2.5 tons of carbon dioxide from being emitted annually (about 3000 kilowatt-hours avoided). If approximately 5000 new homes are built annually and only 25% eventually have water heaters installed, then a solar mandate would prevent nearly 10,000 tons of greenhouse gases additionally from being emitted every year and over 3 million tons after 25 years.

# A solar mandate could add \$690 million to our state over 25 years

A residential solar requirement would keep money circulating in the state economy. Oil is expensive and getting more expensive. In the time since this identical measure was heard by these two committees, the price of petroleum has essentially doubled. Hawai'i now spends nearly \$5 billion annually to import petroleum (approximately 47,000,000 barrels annually<sup>6</sup>). If a solar mandate for new residential units were to pass, we could save millions of dollars annually on oil imports. Consider the previous estimate of 5000 new homes added per year. If the average solar home displaces the need for roughly 5 barrels of oil (comparable to 2.5 tons of CO<sub>2</sub>) and oil stays at \$100 per barrel (it is currently trading at \$110), then this measure would keep \$1.9 million in the state's economy additionally every year (again, considering only the 75% of homes that would not install solar independent of this mandate). Over 25 years (assuming the price of oil *doesn't* increase), that would amount to a collective savings of \$690 million (compared with status quo 25% solar adoption rate).

What's more, the energy from the sun is stored in the form of hot water, offsetting the electrical system peak that occurs in the evening. This helps offset the need for expensive new power plants—another societal benefit from increased residential solar energy use.

# Solar built into the house upfront makes living more affordable

With average household use, most solar water heaters will pay for themselves in energy savings between 3 and 7 years. When systems are built into a home during construction—and when many systems are installed simultaneously in a larger subdivision and economies of scale are realized—solar water heaters are less expensive than an electric heater retrofit. When rolled into a 30-year mortgage, homeowners with solar will start saving money on day one. Even with other financing schemes, solar is a no-brainer investment that brings down the monthly cost of living. If current trends continue, the cost of residential electricity will continue to grow, making electric water heating even more expensive—and solar water heating more of a "no-brainer." Owners have to sacrifice very little to obtain the exact same "service" as they would receive with conventional water heating.

<sup>&</sup>lt;sup>6</sup> State of Hawai'i (2007). Department of Business, Economic Development, and Tourism, Data Book 2006.

The cost of living is a top-of-mind issue for many in Hawai'i. Senate Bill 644 makes new home ownership more affordable by reducing the monthly utility burden.

# The right policy will preserve the robust solar industry in Hawai'i while expanding the benefits of solar to new customers

The solar industry has legitimate concerns about the potential effects of a mandate on the quality of solar installations. They have long memories and remember the unscrupulous fly-by-night installers who were simply taking advantage of the 50% tax credits offered at the time. These poor installations soured some people on the use of solar and did damage to the reputation of the solar industry—damage that lasts today when some cite concerns about leaking roofs or make ridiculous claims about solar energy's effectiveness.

These concerns are not insurmountable. We offer the following amendments to improve the measure and address the concerns of the solar industry

# SUGGESTED AMENDMENTS

The Sierra Club respectfully asks that SB 644 SD3 HD2 be amended in the following ways:

Section 2 (page 6, line 4 through page 7 line 19): We prefer the following language to establish the mandate and direct DBEDT to be the regulatory authority that can grant variances for situations where solar is truly impractical.

**§196-** Solar thermal device required for new single-family residential construction. (a) Beginning with construction for which building permits are issued after January 1, 2010, a solar water heating device shall be installed as the primary water heating system in the construction of every new residential detached single-family residence unless the director of the department of business, economic development and tourism grants a variance because installation of a solar water heating device would be impractical.

(b) By December 31, 2009, the department of business, economic development and tourism shall adopt rules for granting a variance pursuant to this section.

**Section 3 (page 7, line 20 though page 10, line 20**: To retain the existing tax credit for solar retrofits, we strongly request that Section 3 of the House draft 3 of this measure be replaced with Section 3 of the House draft 2 of SB 644. The House draft 2 simply amends Section 235-12.5 to clarify that the tax credits do not apply to new construction.

**§235-12.5** (a) (1) Solar thermal energy systems [for] <u>installed in</u>: (A) Single-family residential property: thirty-five per cent of the actual cost or \$2,250, whichever is less; <u>provided that beginning January 1, 2010</u>, the tax credit shall apply only to residences originally constructed prior to January 1, 2010; provided further that new homes constructed after January 1, 2010, shall not be eligible for the tax credit;

**New Section.** To help ensure that the solar water heating devices installed under this new policy perform as expected, are durable, of high quality, and continue to displace the need for

fossil fuels, we recommend that the Committee amend SB 644 SD3 HD2 with the following new section. We are open to continue working with the Committee and interested parties in crafting the best language to best accomplish this measure's objectives.

**SECTION** . Chapter 269, Hawaii Revised Statutes, is amended by adding a new section to read as follows:

**§269-** Residential solar water heating program; standards, quality assurance criteria, and oversight by public benefits fund administrator. (a) If the public utilities commission appoints a public benefits fee administrator pursuant to section 269-122, the administrator shall implement a residential solar water heating incentive program.

(b) All solar water heating devices installed pursuant to a program established by this section or chapter 196 shall comply with standards, performance, and quality assurance criteria developed and maintained by the fee administrator which contain, at a minimum:

(1) requirements on allowable materials for device components;

(2) standards for device component durability;

(3) requirements on warranty length and coverage;

(4) sizing standards to ensure a minimum solar water fraction for anticipated hot water usage;

(5) pump, wiring, tank, and other technical standards;

(6) safety and security requirements; and

(7) approval criteria for inspections;

provided that the administrator shall convene a technical advisory committee consisting of representatives from the Hawaii Solar Energy Association, the Building Industry Association, licensed contractors, and other individuals, organizations, or agencies as deemed necessary by the administrator to assist in the development of standards and quality assurance criteria before December 31, 2009, and annually thereafter.

(c) If the public utilities commission appoints a public benefits fee administrator pursuant to section 269-122, the administrator shall implement an inspection program to ensure that all solar water heating devices pursuant to a program established by this section or chapter 196 shall comply with standards and quality assurance criteria established by this section.

Thank you for the opportunity to testify.

# Malama Kaua'í

# RE: SB644 SD3 HD2- RELATING TO ENERGY RESOURCES

To: House Committee on Finances

From: Malama Kaua'i

Wednesday, March 26, 2008, 11:00 a.m. Conference Room 308 State Capitol, 415 South Beretania Street

## **Testimony to support SB644**

Dear Honorable House Members,

I am writing to state Malama Kaua'i's support for Senate Bill 644. Independence from fossil fuels is critical for the security and wellbeing of Hawai'i's residents and for the sustainability and vitality of Hawai'i's economy. Mandating solar water heaters on new homes will reduce Hawai'i's increasing dependence on foreign fossil fuel.

Government must respond immediately to the changing economies of energy. Installing solar water heaters will significantly reduce energy costs for homeowners, a cost that will only grow as the price of oil rises.

Government also must respond to the urgency of man-made climate change, which is no longer a scientific debate. The requirement of solar water heating will lower each family's carbon footprint and reduce Hawai'i's contribution to global climate change.

Malama Kaua'i urges the Committee on Finances to leave the Renewable Energy Tax Credit at 35% instead of reducing it to 20%. If alternative energy technologies are to become competitive in the market and available to working-class people, government must support them with tax incentives until they become mainstream. This tax incentive will not cost the state a great deal of money, as it will end in 2010, but it *will* make the difference for families deciding whether or not to install a solar water heater.

Please pass this bill to improve and protect the security and general wellbeing of the people of Hawai'i.

With respect,

Andrea Brower Malama Kaua'i 808-635-1659



# Testimony to the House Committee on Finance Wednesday, March 26, 2008 at 11:00 a.m. Conference Room 308, State Capitol

# RE: SENATE BILL NO. 644, SD3, HD2 RELATING TO ENERGY RESOURCES

Chair Oshiro, Vice Chair Lee, and Members of the Committee:

My name is Christine H. Camp, Chair of The Chamber of Commerce of Hawaii, Land Use and Transportation Committee. The Chamber strongly opposes S.B. No. 644 SD 3, HD 2.

The Chamber is the largest business organization in Hawaii, representing 1100 businesses. Approximately 80% of our members are small businesses with less than 20 employees. The organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

The bill proposes to amend Chapter 196 HRS to allow the Department of Business, Economic Development and Tourism to require that as of January 1, 2010, all new single-family residential construction will be required to install a:

- Solar thermal water heating device;
- Substitute renewable energy device; or
- Demand water heater device.

The solar thermal water heating device must be installed by a licensed installer in compliance with all manufacturer and industry standards. The licensed installer of the device, or the architect or engineer licensed under chapter 464, shall submit a written attestation to the county building code authority stating that the installed device is suitably sized for the number of people expected to occupy the dwelling and meets the applicable county building code, unless the installation is:

- a) Impracticable due to poor solar resource; or
- b) Cost prohibitive.

If impracticable or cost prohibitive, a substitute renewable energy device that is the most practical, energyefficient substitute device available shall be installed, as determined by an architect or engineer licensed under chapter 464, and the architect or engineer shall attest in writing that a solar thermal device cannot be installed for the reasons stated, and submits the written attestation on behalf of the building permit holder to the county building code authority; or,

A demand water heater device approved by Underwriters Laboratories Inc., is installed. For the purposes

Page 2 of 3 The Chamber of Commerce of Hawaii Testimony on SB 644, SD3, HD2 March 26, 2008

of this paragraph, "demand water heater" means a tank-less, instantaneous water heater that provides hot water only as it is needed through the use of a gas burner.

The bill also proposes to amend Section 235-12.5, HRS to allow for the:

- 1. Reducing of the Solar Thermal Energy System Tax Credit from 35% to 15% on single-family dwellings constructed after January 1, 2010, conditioned on continued applicability of Hawaiian Electric Company's solar water heater equipment, use, and installation standards program, including its 100-point rating scale for solar water heating units and rebate, to these solar thermal energy systems; and
- 2. Reducing the Solar Thermal Energy System Tax Credit from 35% to 20% on single-family dwellings constructed before January 1, 2010.

As proposed, the developer of one or more single family residential units will receive a tax credit of 15% of the cost of the system or \$2,250 whichever is less for a solar thermal water heater. On a \$5,000 system, this tax credit would amount to \$750. The remaining \$4,250 would be added to the price of the new unit. There is no information on an approximate cost of either a substitute renewable energy device, or a demand water heater device. These costs are in addition to existing government exactions for:

- Schools (DOE Fair Share Contribution);
- Roads (impact fees);
- Sewer (meter charges);
- Water (meter/development charges); and
- Parks.

This does not include other public facilities charges for police or fire stations that are associated with larger developments. In addition, there are inclusionary zoning requirements for affordable housing placed on rezoning at the county. For example, the City and County of Honolulu requires 30% of the total number of units in a development to be affordable: 10% priced at the 80% and below HUD median income limit and 20% priced at the 120% and below HUD median income limit.

For 2008, the HUD median income limit for a family of 4 in Honolulu is \$77,300. Assuming a 6%, 30 year fixed mortgage with a \$10,000 down, the maximum price would be approximately \$275,000. The maximum prices for the 80% to 120% income limits would be between \$270,000 and \$328,000. These prices are inclusive of all the government exactions listed earlier, and the pro-rata share of the internal infrastructure costs required for the project.

This bill was submitted during the 2007 Legislative Session and has been revived based on crude oil prices exceeding \$100 per barrel. Based on this increase, the legislature initially believed that it is the appropriate time to shift the burden of the state's energy policy from state funded incentives to mandates on all new residential construction. However, the latest version of the bill (HD 2), the legislature is now proposing mandates with reduced incentives. While we agree that the rising price of fossil fuels will cause all of us to

Page 3 of 3 The Chamber of Commerce of Hawaii Testimony on SB 644, SD3, HD2 March 26, 2008

reconsider how we all use our limited resources, we question why government intervention is needed in this particular case. Mandating solar water heaters in all new construction seems to imply that new home buyers lack the ability to make this choice in light of the raising price of fossil fuels.

If the concern is truly to conserve energy and reduce our dependency on fossil fuels providing true transportation alternatives which currently uses 63% of our imported oil compared to 30% used for electricity may provide for more immediate and long-term benefits.

We believe that the choices, not mandates should be the role of government especially when the government intervention goes beyond its basic role of providing for our public health, safety or welfare. We do not support government interference in the free market system. The choice of a hot water heating system for a homeowner should be governed by market incentives rather than regulation. Compliance with these types of regulations will increase the cost of the homes in Hawaii, and impact the delivery of affordable housing units

Finally, the bill does not discuss how the State DBEDT will implement and more importantly enforce this mandate. Some consideration should be given the staffing and resources required to monitor and enforce this program, including some type of process to adjudicate situations where there is non-compliance.



**Conservation Council for Hawai'i** 

Testimony Presented to the House Committee on Finance

Hearing: Wednesday, March 26, 2008 11 am Room 308

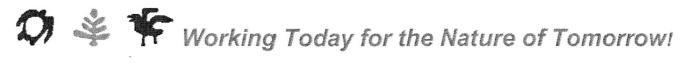
Re: Support for SB 644 SD 3 HD 2 Relating to Energy Resources

Aloha. The Conservation Council for Hawai'i supports SB 644 SD 3 HD 2, which would require solar energy or equivalent systems for heating water in newly constructed residential properties. This bill will allow us to reduce our dependence on fossil fuels and global warming pollution, and Hawai'i home owners will thank you for the cost savings.

Global warming and climate change pose ecosystem-level threats to native birds and their habitat from sea level to Hawaiian cloud forests. The low-lying basalt islands and coral atolls of the Northwestern Hawaiian Islands provide habitat for 90 percent of Hawai'i's seabird populations. Approximately 14 million seabirds live there, including 5.4 million breeding pairs of 18 species. The disappearance of Whale Skate Island is one of the more dramatic examples of global warming impacts to Hawai'i's native birds at sea level. The island was a few acres in size, and covered with vegetation, nesting seabirds, endangered Hawaiian monk seals and threatened green sea turtles. Whale Skate Island no longer exists as a result of erosion and rising sea level. Global warming, coral bleaching, and drought resulting from El Niño events, affect ocean productivity and food availability for seabirds.

Studies indicate that global warming may also allow mosquitoes to breed yearround at higher elevations than they do now, eliminating suitable habitat for native upland birds. Mosquitoes are the vector for *Plasmodium relictum*, a pathogen that transmits avian malaria to native forest birds. Mosquitoes also transmit avian pox directly to native forest birds. Modeling of climate change on the islands of Kaua'i, Maui, and Hawai'i indicates that, as temperatures rise by just a few degrees, suitable forest bird habitat will be lost as the mosquito zone shifts upwards. Birds occupying high-elevation forests currently free of diseases will become infected as temperatures rise. Scientists also predict that the "species temperature tolerance zones" for native and introduced species will likely be shifted upward in elevation. Plants and animals may have to relocate upslope, and native cloud forests may be reduced in size.

Global warming and climate change may also cause changes in frequency and intensity of windstorms, drought, and fire, which may favor invasive plant species over native ones.



Telephone/Fax 808.593.0255 • email: info@conservehi.org • web: www@conservehi.org P.O. Box 2923 • Honolulu, HI 96802 • Office: 250 Ward Ave., Suite 212 • Honolulu, HI 96814

Hawai'i Affiliate of the National Wildlife Federation

President: Julie Leialoha \* Vice-President: Nelson Ho \* Secretary/Treasurer: Kim Ramos \* Directors: Fred Kraus, Ph.D. \* Douglas Lamerson, George Robertson \* Claire Shimabukuro \* Helene Takemoto \* Mashuri Waite \* Executive Director: Marjorie Ziegler Please pass this bill out of committee. Mahalo nui loa for the opportunity to testify.

Sincerely,

Marjorie Ziegler

# Testimony Before the House Committee on Finance Agenda # 2

### March 26, 2008, 11:00am

# S.B. 644 SD3 HD2 RELATING TO ENERGY RESOURCES

# By: Alan Hee Energy Services Department Hawaiian Electric Company, Inc.

Chair Oshiro, Vice Chair Lee and members of the Committee:

My name is Alan Hee, and I represent Hawaiian Electric Company (HECO), Hawaii Electric Light Company (HELCO) and Maui Electric Company (MECO).

# Hawaiian Electric Company supports the use of solar energy, but must oppose S.B. 644 SD3 HD2.

In testimony before the House Economic Development and Business Concerns Committee HECO supported HD1 of this bill which mandated solar water heating in new residential homes. HECO also provided recommendations for additional language with the intent of maintaining the current high quality of the solar water heating installations. HECO still supports HD1.

However, HD2 contains added language which is problematic.

- HD2 continues a tax credit for solar water heating systems installed in new homes under the mandate, but <u>only if</u> HECO's 100-point installation inspection and HECO's \$1000 rebate apply.
  - a. First, it is unlikely that HECO would continue to use ratepayer funds to pay rebates to encourage solar water heating on new homes, when the installation of solar water heating is mandated under law. Utility rebates are intended to encourage customer decision; they are not intended to fund government mandates.
  - b. Second, HECO's energy efficiency programs, such as its Residential Efficient Water Heating (REWH) and Residential New Construction (RNC) Programs, which provide the 100-point inspection and the solar water heating rebates, will be transitioned to a non-utility administrator on or about January 2009. Therefore, even if HECO wanted to continue the 100-point installation inspection and pay the rebate, it would not be in a position to do so after January 2009.
  - c. Since the tax credit for new homes relies upon some action that HECO takes at its discretion, it places HECO in the awkward position of determining in part what the state's financial picture will look like.
- 2. HD2 decreases the state tax credit from 35% to 20% for solar water heating installed on residences constructed prior to January 1, 2010. The decrease in tax credit will make solar water heating systems less affordable and is not consistent with the creation of jobs and the increase in state revenues that are identified in the bill's preamble. Nor is the decrease in the tax credit consistent

with the purpose of the bill, which is to increase the use of renewable energy to protect our environment, reduce pollution, and enhance Hawaii's local economy.

In addition to the above concerns, HECO will face a substantial dilemma when planning for the future energy needs of our community. Lacking a clear quality control mechanism for future solar water heating systems, HECO may not be able to use the full electrical load deferral for these systems in its planning process.

We request that this committee:

- 1. Strike the language making the tax credits for new construction contingent upon the application of HECO's 100-point installation inspection and the payment of a solar water heating rebate.
- 2. Retain the 35% tax credit for solar thermal systems for homes built prior to January 1, 2010.
- 3. Consider further amendments to include language specifying what the installation standards will be for quality control purposes or how the installation standards would be developed. For example, it would be beneficial for the solar industry to work with the counties to develop required installation procedures, standards, and specifications, including an approved products list. It would also be beneficial if the Legislature were to appropriate funds for the on-going development of these requirements. These requirements are necessary in order to provide quality systems that will deliver the full benefits of solar water heating to consumers.

Thank you for this opportunity to testify.



# HOUSE COMMITTEE ON FINANCE

# SENATE BILL 644 SD 3 HD 2

# BY STEVEN GOLDEN

# WEDNESDAY, MARCH 26, 2008

Chair Oshiro and members of the Committee:

I am Steve Golden, Vice President of External Affairs for The Gas Company. Thank you for this new opportunity to provide testimony on Senate Bill 644 SD 3 HD 2, relating to energy resources.

This bill seeks to promote energy efficiency in Hawaii by requiring that solar water heating or on-demand gas water heaters be installed in the construction of all new single family residences, unless installation is impracticable due to poor solar resource, installation is cost-prohibitive or a substitute renewable energy device is installed.

The Gas Company supports the state's initiative to promote renewable energy, energy efficiency and the diversification of energy resources. Gas, which is recognized worldwide as a clean and efficient energy source, helps to diversify Hawaii's energy resources and reduces the pressure on the electric infrastructure. Our existing Oahu gas manufacturing plant in Campbell Industrial Park utilizes a by-product of the crude oil refining process. If this by-product was not used to make gas for water heating and other uses, it would likely be exported out of the State. Therefore, reducing the consumption of gas manufactured in Hawaii will not result in a corresponding reduction in the amount of crude oil imported into the State.

The residential segment of The Gas Company's statewide business represents approximately 90% of our current customer base of 67,000 customers. Often it is not economic to hook up a residence to The Gas Company's underground utility system to provide gas for cooking and/or clothes drying unless the customer also chooses gas for water heating. This bill will allow us to continue to offer energy efficient alternatives in the residential market. The current version of the bill provides consumers with a choice among high efficient water heating technologies and rightly recognizes that on-demand gas water heaters are an energy efficient alternative that residential homeowners should be given the opportunity to select when deciding how best to heat their water. While The Gas Company continues to have concerns regarding limiting the consumers' choice in selecting water heating technologies, we recognize the State's desire to encourage the most energy efficient water heating technologies. We believe that gas tank water heaters are also an energy efficient means of heating water when compared to other alternatives and should also be considered.

The Gas Company continues to support state tax credits for solar water heating even though solar water heating directly competes with our business. Over the past several years, we have supported this incentive because we recognize that tax credits provide a positive market signal for buyers to choose renewable technologies and diversify the State's energy base.

Thank you for allowing The Gas Company to present these comments.



Building Industry Association March 26, 2008 Committee on Finance 11 a.m. Conference Room 308

The Honorable Marcus Oshiro, Chair and Member Committee on Finance State House of Representatives State Capitol, Room 308 Honolulu, Hawaii 96813

Dear Chair Oshiro and Members:

# Subject: Senate Bill No. SB 644 SD 3, HD 2 Relating to Energy Resources

I am Karen Nakamura, Chief Executive Officer of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii.

# BIA-Hawaii strongly opposes S.B. No. 644 SD 3, HD 2.

The bill proposes to amend Chapter 196 HRS to allow the Department of Business, Economic Development and Tourism to require that as of January 1, 2010, all new single-family residential construction will be required to install a:

- Solar thermal water heating device;
- Substitute renewable energy device; or
- Demand water heater device.

**The solar thermal water heating device** must be installed by a licensed installer in compliance with all manufacturer and industry standards. The licensed installer of the device, or the architect or engineer licensed under chapter 464, shall submit a written attestation to the county building code authority stating that the installed device is suitably sized for the number of people expected to occupy the dwelling and meets the applicable county building code, unless the installation is:

- a) Impracticable due to poor solar resource; or
- b) Cost prohibitive.

If impracticable or cost prohibitive, **a substitute renewable energy device** that is the most practical, energy-efficient substitute device available shall be installed, as determined by an architect or engineer licensed under chapter 464, and the architect or engineer shall attest in writing that a solar thermal device cannot be installed for the reasons stated, and submits the written attestation on behalf of the building permit holder to the county building code authority; or,

A demand water heater device approved by Underwriters Laboratories Inc., is installed. For the purposes of this paragraph, "demand water heater" means a tank-less, instantaneous water heater that provides hot water only as it is needed through the use of a gas burner.

The bill also proposes to amend Section 235-12.5, HRS to allow for the:

- 1. Reducing of the Solar Thermal Energy System Tax Credit from 35% to 15% on singlefamily dwellings constructed after January 1, 2010, conditioned on continued applicability of Hawaiian Electric Company's solar water heater equipment, use, and installation standards program, including its 100-point rating scale for solar water heating units and rebate, to these solar thermal energy systems; and
- 2. Reducing the Solar Thermal Energy System Tax Credit from 35% to 20% on singlefamily dwellings constructed before January 1, 2010.

As proposed, the developer of one or more single family residential units will receive a tax credit of 15% of the cost of the system or \$2,250 whichever is less for a solar thermal water heater. On a \$5,000 system, this tax credit would amount to \$750. The remaining \$4,250 would be added to the price of the new unit. There is no information on an approximate cost of either a substitute renewable energy device, or a demand water heater device. These costs are in addition to existing government exactions for:

- Schools (DOE Fair Share Contribution);
- Roads (impact fees);
- Sewer (meter charges);
- Water (meter/development charges); and
- Parks.

This does not include other public facilities charges for police or fire stations that are associated with larger developments. In addition, there are inclusionary zoning requirements for affordable housing placed on rezoning at the county. For example, the City and County of Honolulu requires 30% of the total number of units in a development to be affordable: 10% priced at the 80% and below HUD median income limit and 20% priced at the 120% and below HUD median income limit.

For 2008, the HUD median income limit for a family of 4 in Honolulu is \$77,300. Assuming a 6%, 30 year fixed mortgage with \$10,000 down, the maximum price would be approximately \$275,000. The maximum prices for the 80% to 120% income limits would be between \$270,000 and \$328,000. These prices are inclusive of all the government exactions listed earlier, and the pro-rata share of the internal infrastructure costs required for the project.

This bill was submitted during the 2007 Legislative Session and has been revived based on crude oil prices exceeding \$100 per barrel. Based on this increase, the legislature initially believed that it is the appropriate time to shift the burden of the state's energy policy from state funded incentives to mandates on all new residential construction. However, the latest version of the bill (HD 2), the legislature is now proposing mandates with reduced incentives. While we agree that the rising price of fossil fuels will cause all of us to reconsider how we all use our limited resources, we question why government intervention is needed in this particular case. Mandating solar water heaters in all new construction seems to imply that new home buyers lack the ability to make this choice in light of the raising price of fossil fuels.

If the concern is truly to conserve energy and reduce our dependency on fossil fuels providing true transportation alternatives which currently uses 63% of our imported oil compared to 30% used for electricity may provide for more immediate and long-term benefits.

We believe that the choices, not mandates should be the role of government especially when the government intervention goes beyond its basic role of providing for our public health, safety or welfare. We do not support government interference in the free market system. The choice of a hot water heating system for a homeowner should be governed by market incentives rather than regulation. Compliance with these types of regulations will increase the cost of the homes in Hawaii, and impact the delivery of affordable housing units

Finally, the bill does not discuss how the State DBEDT will implement and more importantly enforce this mandate. Some consideration should be given the staffing and resources required to monitor and enforce this program, including some type of process to adjudicate situations where there is non-compliance.

Thank you for this opportunity to express our views.

Karen J. Nakamur

# THE GENTRY COMPANIES



The Honorable Marcus Oshiro, Chair and Member Committee on Finance State House of Representatives State Capitol, Room 308 Honolulu, Hawaii 96813

Dear Chair Oshiro and Members:

Subject: Senate Bill No. SB 644 SD 3, HD 2 Relating to Energy Resources

I am Michael Brant, Vice President – Engineering for Gentry Homes, Ltd. Gentry Homes has been building homes for Hawaii's residents for the past 40 years. For the past 3 years we have installed solar water heating systems as a standard feature in the homes we construct and sell. A total of 546 systems have been installed during this period. We have been able to do this because the cost of these systems is mitigated by a HECO rebate and by state tax credits. We believe if these systems are mandated the rebate and tax credits would no longer be available and the full cost of the system will then be passed onto the consumer.

Gentry Homes opposes Senate Bill No. SB 644 SD 3, HD 2 because we believe mandating these systems will increase the cost of homes to Hawaii's residents.

Thank you for the opportunity to share our views with you.

SNI Chart



100 Kahelu Avenue Mililani, Hawaii 96789-3997 P.O. Box 898900 Mililani, Hawaii 96789-8900 (808) 548-4811 Fax (808) 548-6670

March 26, 2008

To: Honorable Marcus R. Oshiro, Chair House Committee on Finance

Fr: Bruce Barrett, Executive Vice President of Residential Operations Castle & Cooke Homes Hawaii

# Re: <u>SB 644, SD3, HD2, Relating to Energy Resources - Comment</u> <u>House Committee on Finance Wednesday, March 26, 2008 – 11 AM,</u> <u>Conference Room 308</u>

On behalf of Castle and Cooke Homes Hawaii ("Castle & Cooke"), we would like to offer our comments in regards to SB 644, SD3, HD2, relating to Energy Resources.

The purpose of this bill is to mandate the installation of solar thermal or demand water heaters in all new single-family residences constructed after 1/1/2010, to reduce the State Renewable Energy Tax Credit to 20 percent for solar thermal systems in single-family residences constructed before 1/1/2010 and to extend the credit at 15 percent, on certain conditions, to residences constructed after 1/1/2010. It is our understanding that this bill may also eliminate the HECO rebate.

If the intent is to increase the use of renewable energy technology on new homes, we believe continued and possibly expanded incentives are more beneficial than a mandate that may add cost to new homes while reducing or eliminating incentives. Incentives lower the overall net costs to the developer and are passed along to the homebuyer as savings.

Castle & Cooke supports the use of renewable energy such as solar thermal water heating systems and we presently offer solar water heating as an option in our single family home projects using the current incentives (HECO rebate, Federal and State tax credits). As we move to the future, our plan is to incorporate, where feasible and practical, renewable energy features into our new homes.

Should you have any questions, feel free to contact me at 548-3746 or Carleton Ching, Vice President of Government and Community Relations, at 548-3793.

N

From:Fred Moore [discover@hsimechanical.com]Sent:Tuesday, March 25, 2008 10:29 AMTo:FINTestimonyCc:Mary Flood - HI; Karen Iwamoto; Karen Nakamura

Subject: SB 644, SD3, HD2 mandated solar . . .

March 25, 2008

The Honorable Marcus Oshiro, Chair and Member Committee on Finance State House of Representatives State Capitol, Room 308 Honolulu, Hawaii 96813

Dear Chair Oshiro and Members:

# Subject: Senate Bill No. SB 644 SD 3, HD 2 Relating to Energy Resources

I am Fred Moore, President/Principal RME - HSI Mechanical, Inc., a Hawai'i Small Business Enterprise since 1979. HSI has 41 employees who, in part, our members of the Sheet Metal and Plumbers/ Pipefitters trade unions.

# HSI Mechanical, Inc. strongly opposes S.B. No. 644 SD 3, HD 2.

The State of Hawai'i has enjoyed one of the largest, per capita, installation rates of solar thermal water heating devices in the United Statess. This accomplishment has been driven by knowledgeable consumers, who are well educated by private and government organziations vs. a mandated program. Both consumers and installers have enjoyed the available HECO rebates and State / Federal tax credits. Why our legislature would want to mandate the use of solar is very questionable as it would drive up the end user cost as the rebates would no longer be available.

If the concern is truly to conserve energy and reduce our dependency on fossil fuels providing true transportation alternatives which currently uses 63% of our imported oil compared to 30% used for electricity may provide for more immediate and long-term benefits.

We believe that the choices, not mandates should be the role of government especially when the government intervention goes beyond its basic role of providing for our public health, safety or welfare. We do not support government interference in the free market system. The choice of a hot water heating system for a homeowner should be governed by market incentives rather than regulation. Compliance with these types of regulations will increase the cost of the homes in Hawaii, and impact the delivery of affordable housing units.

Thank you for the opportunity to express our position on the proposed legislation.

With Aloha,

Fred Moore President / Principal RME HSI Mechanical, Inc. 227 Puuhale Road Honolulu, HI 96819 Cell: 808-478-8482

2005 President, BIA-Hawai'i

"Truth has not special time of its own. Its hour is now always and indeed then most truly when it seems unsuitable to actual circumstances." - Albert Schweitzer

From: randy ching [oahurandy@yahoo.com]

Sent: Monday, March 24, 2008 3:16 PM

To: FINTestimony

Subject: In support of SB644 SD3 HD2 - relating to energy resources

House Finance Committee Chair Marcus Oshiro Vice Chair Marilyn Lee

In support of SB644 SD3 HD2 - relating to energy resources

Hearing on Wednesday, March 26 at 11 a.m. in conference room 308

Aloha Chair Oshiro, Vice Chair Lee, and members of the committee,

The Sierra Club, Oahu Group supports SB 644 SD3 HD2 which would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels. We would ask that the tax credit be restored to 35% because people need the incentive to purchase a solar water heater. The HD2 knocks down the incentive to 20% on houses built before 1/1/10 and decreases it to 15% after 1/1/10. Even though the cost of a house would increase slightly with the passage of this bill, the howeowner would recoup the cost over the life of the home from savings on electricity. The homeowner would even come out a little ahead with the state tax credit. Every house, townhouse and apartment in Hawaii should have solar water heaters. It makes sense, given that we receive so much solar power. Please pass SB644 SD3 HD2 with the full 35% tax credit restored. Mahalo. Sincerely, Randy Ching Sierra Club, Oahu Group chair oahurandy@yahoo.com

Do You Yahoo!? Tired of spam? Yahoo! Mail has the best spam protection around http://mail.yahoo.com

From:Lance Holter [holter@maui.net]Sent:Tuesday, March 25, 2008 1:16 PMTo:FINTestimonyCc:Rep. Marcus Oshiro; Sen. Gary HooserSubject:In support of SB644 SD3 HD2 Solar Bill

Importance: High

March 25, 2008 Chair Marcus Oshiro FINANCE COMMITTEE SB644SD3HD2

I am in favor of the solar bill SB644SD3HD2. Yesterday I received my new electric Bill. My cottage has solar hot water and it's bill is \$100.11, my home doesn't because it needed work before I could install it, it's electric bill is \$282.53. WOW WHAT A SAVINGS! Installing solar should be a mandatory effort all over Hawaii and those that stand in the way should get their heads out of the sand and pay attention. Hawaii is in big trouble if we don't make ourselves energy efficient, time is wasting let's do it and do it now. Don't let special interests derail an important change in the way we get our energy and savings from oil imports. Be sustainable support SB644 SD3 HD2. I am a Hawaii Licensed Building and Plumbing contractor and believe having installed solar will make homes more desirable to purchase and that present plumbing codes and inspections will verify that the installations are done properly. The best time to install solar is during construction not after. It's also cheaper to install solar while the structure is under construction. It's more expensive to retrofit.

Lance Holter Chairman , Maui Democratic party tele 579-9442 Box 790656 Paia, HI 96779

From: Elizabeth McDermott [bmcd50@aol.com]

Sent: Tuesday, March 25, 2008 11:44 AM

To: FINTestimony

Cc: Elizabeth McDermott

Subject: Please PASS SB 644

COMMITTEE ON FINANCE Rep. Marcus R. Oshiro, Chair Rep. Marilyn B. Lee, Vice Chair

Wednesday, March 26, 2008 11:00 A.M. Conference Room 308

Chair Oshiro and members of the Committee,

I **strongly** support SB 644 requiring that all new homes in Hawaii be built with solar hot water heaters, exempting those homes where solar would not be practical or beneficial.

Incentives introduced over the years to encourage installation of solar hot water heating in new and existing homes have helped but are still barely moving us along toward widespread adoption, with only some of our island homebuilders including solar as a standard feature. We don't have the luxury of these incremental steps anymore with energy costs financially straining Hawaii's homeowners as never before, and global warming accelerating each year.

Hawaii's leaders were praised last year for setting ambitious and exemplary goals for reducing Hawaii's contribution to global warming and making our state a model of sustainability. Approving this measure, more than almost any other single act this session, will demonstrate that you are serious about that.

# Key points:

Demand gas water heaters can be included as an option, but should ONLY be allowed when solar is NOT feasible. I would prefer to see that this bill keep the focus on solar hot water heating.

The argument that this will increase the cost of homes and homeowner's mortgages is false. Today, homeowners installing solar can obtain "green mortgages" which qualify buyers for higher loan amounts by calculating the long term utility savings they are expected to enjoy as income, among other strategies. Bank of America, Citigroup and JP Morgan Chase are among the banks now offering borrowers credit and rebates when purchasing an energy-efficient home. And the increased buildings costs will become negligible when solar installation begins to happen at this scale.

This measure will improve Hawaii's economy and expand business for Hawaii's solar providers, not threaten it. However **strong performance standards MUST be included in the bill.** Should builders begin installing deficient solar hot water heating systems this will harm the solar industry, discouraging interest.

And it seems **counterintuitive to at the same time cut the solar tax credit from 35% to 20%**. We should be doing everything we can to encourage the installation of solar, particularly in existing homes. We need bold steps forward here, not one big step forward and another step back. Rebates from the Energy Efficiency Utility which will take over energy efficiency programs from HECO, MECO and HELCO in 2009 should also be encouraged.

I ask you to vote for this measure which will broadly expand economic development in our state, and move Hawaii significantly toward true sustainability.

With recession fast approaching homeowners are going to be looking to move into homes that are going to

save them money, not bankrupt them soon as they're through the door. In the same way they are ditching their SUV's for economy cars, Hawaii residents are going to steer away from guzzler homes, and want some help with the initial costs to get into them.

Hawaii should be leading, building the homes of the future, not the past.

Please vote with integrity.

Mahalo,

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Beth McDermott Catalyst Communications LLC Hawaii Green Homes Network Honolulu HI 96822 Tel (808) 988-6004 Cell (808) 782-7502

From:Lynn Hodgson [hodgson@hawaii.edu]Sent:Tuesday, March 25, 2008 8:51 AM

To: FINTestimony

Subject: SB644 SD3 HD2

Chairman Oshiro,

I'd like to support the passage of this bill -- SB644 SD3 HD2.

Solar water heaters seem like a logical and economical choice for Hawaii residents. The literature I've read indicates we should keep the high tax credit (35%) for new homes, to encourage more folks to follow through. It also makes sense to me to keep tax credits on older homes to encourage re-fitting.

Thanks, Lynn

Lynn M. Hodgson Univ. Hawai'i - West O'ahu Professor of Natural Sciences

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From: JOHN KUNESH [spiritedmassage@msn.com]

Sent: Tuesday, March 25, 2008 10:12 AM

To: FINTestimony

Subject: Testimony SB644 SD3 HD2 Solar water heating bill

Testimony SB644 SD3 HD2 Solar water heating bill

Aloha Hawaii Legislators,

Last night I attended a crowded Apollo Kauai meeting focusing on the overwhelming benefits of SB 644 SD3 HD2, the Solar water heating bill, and the pervasive lack of awareness among the populace and even some legislators that it is the lowest hanging fruit towards conserving our remaining resources!

This bill is an obvious first step for Hawaii among many, that we will be forced to enact as our economy and environment adapts to the acceleration of Climate Change, Resource Depletion and Species Mass Extinction. Clearly business as usual will not suffice.

The last committee's amendment of reducing tax credits to 20% is based on business as usual. Business concerns must not diminish the effectiveness of this law. Please consider the real consequences of this change. The reasoning is well thought-out in keeping the original 35% tax credit. Your clarity and leadership will prove life changing for our Islands. Please don't let too many Chefs water down this nourishing soup you have cooked up for Hawaii!

Respectfully,

John Kurtis Kunesh 1000 Friends of Kauai Board Member

From: Denise Antolini [antolini@hawaii.rr.com]

Sent: Tuesday, March 25, 2008 8:03 AM

To: FINTestimony

Subject: 3/26/2008 SB644 Agenda #2

SOLAR HOT WATER BILL - SB644 HOUSE FINANCE COMMITTEE March 26, 2008 Hearing, 11:00 a.m.

Dear Chair Oshiro, Vice Chair Lee, and Members -

#### I strongly support SB644.

If Hawaii is serious about increasing alternative energy options and decreasing dependence on imported fossil fuels, widespread residential solar hot water is an obvious solution.

This bill takes an approach that is cost-effective ("pennies on the dollar") to homeowners and the public through a up-front mandate on new housing. This addresses *future growth* in electricity demand - and will **reduce** *future demand* substantially. Only a mandatory aproach can achieve this goal effectively.

# Esuring that all new housing that *can* have solar HW *does* have it, from the get-go, with no fuss to the new owners and not as a more-expensive retrofit

This committee should be very skeptical of any claims that "we are already doing enough" with solar HW the statistics on the amount of solar hot water installations in Hawaii appear to be highly misleading because they likely include military housing (which has wisely been doing mandatory installs for years). Even a casual observer of Oahu's neighborhoods can see that the actual percentage of houses -- old and new -with solar HW is pitifully small. For Hawaii - the state with the greatest potential for solar power - this existing lack of solar hot water coverage is actually shocking.

<u>For *current* electricity demand, retaining the tax credits</u> for existing homes is also critical. Making sure that existing homeowners continue to have an incentive to install solar HW through tax credits is essential.

Both approaches (forward and backward reductions in demand) need to be in place - they complement each other.

Our family installed solar HW about a year ago - with no inconvenience to us, and a little up front investment, the cost savings have been substantial, shaving a large percentage off of our electricity bill.

Moreover, having solar HW in place and working well on a widespread basis has a spillover education effect - it shows our neighbors and our children that solar power is a viable energy future for Hawaii.

Mahalo,

Denise Antolini Pupukea resident 638-5594

∽rom:	Judie Hilke Lundborg [judie@aloha.net]
Jent:	Monday, March 24, 2008 10:19 PM
То:	FINTestimony
Subject:	Testimony SB 644

Aloha Legislators,

I am writing to urge your support of SB644 mandating solar hot water heaters in new residences beginning 2010. I would ask that the tax credit not be reduced from 35%. The issue of global climate change is critical and this bill will help tremendously in lowering CO2 emmissions. The continued 35% tax credit is needed as a further incentive to get everyone on board.

Thank you for supporting this bill.

Aloha,

Judie Hilke Lundborg Lihue, Hawaii 639-0212

From: Margery H. Freeman [freeman@aloha.net]

Sent: Tuesday, March 25, 2008 9:41 AM

To: FINTestimony

Subject: SB 644 SD3 HD2 - in support

SB644 SD3 HD2. - in support

3/26/08, at 11:00 Wed. Rm. 308

#### Chairman Oshiro,

I hope this Committee will vote in support of SB 644. It requires installation of solar thermal or demand water heaters in single-family residences built after 1/1/2010 and has other sections relating to the Renewable Energy Tax Credit. Basically this bill is a no-brainer. Obviously solar hot water heaters are the single, easiest way to cut down on electrical use. Having them required on new family homes will have no effect on sale of homes and a huge effect on electrical use.

Please vote from SB 644.

Sincerely,

Marge Freeman 6448 Kaahele St. Kapaa, HI 96746

From: Robert King [bking@biodiesel.com]

Sent: Tuesday, March 25, 2008 3:13 PM

To: FINTestimony

Subject: SB 644, SD3, HD2

Representative Oshiro, Chair Representative Lee, Vice Chair

I write in support SB 644 requiring Solar Thermal heating.

I would also encourage support SB 644 with the 35 percent tax credit for new and existing residential units instead of the reduced credit. This is one of the most cost-effective ways to reduce consumption of foreign petroleum while also reducing greenhouse gas emissions.

Aloha,

Bob King

Robert King President **Pacific Biodiesel Inc.** 40 Hobron Avenue Kahului, Hawaii 96732 Tel 808-877-3144 Fax 808-877-5030 www.biodiesel.com

From:	jonathan jay [jonathan@dakauai.com]
ent:	Tuesday, March 25, 2008 12:15 PM
To:	FINTestimony
Subject:	Testimony SB644 SD3 HD2 Solar water heating bill

Please Push this bill forward in the strongest possible configuration. And then keep pushing because we can, and must do better.

Let me put it like this: it is a crime for there NOT to be solar hot water panels on every single roof in the archipelago. Fully 1/3 of the residential use of electricity is used simply to make water hot.

We can continue business as usual and import millions of metric tons of coal and jillions of barrels of oil (90% of our electricity in HI comes from fossil fuel sources) OR we can allow the sun to do it for FREE, and REDUCE our carbon footprint dramatically.

If it was only 'saving the planet' only a small percentage of people would see the wisdom in being for it. Since we can also save billions of dollars and staunch a massive capital drain from the islands, everyone should be on board.

Please show show Bold Leadership here and get the right thing.

mahalo,

jonathan jay Moku Puna, Kaua`i

	Art Mori [amori@netserver05.chaminade.edu] Monday, March 24, 2008 5:23 PM
То:	FINTestimony SB 644, SD3, HD2

COMMITTEE ON FINANCE Rep. Marcus R. Oshiro, Chair Rep. Marilyn B. Lee, Vice Chair

Wednesday, March 26, 2008 11:00 A.M. Conference Room 308

SB 644, SD3, HD2 Requires installation of solar thermal or demand water heaters in singlefamily residences constructed after 1/1/2010; Reduces to 20%, Renewable Energy Tax Credit for solar thermal systems in single-family residences constructed before 1/1/2010; Extends the credit at 15%, on certain conditions, to residences constructed after 1/1/2010.

Life of the Land supports 35 percent tax credit for new and existing residential units and rebates from the Energy Efficiency Utility which will take over energy efficiency programs from HECO, MECO and HELCO in 2009.

I support this bill and the Life of the Land position. This bill should have been enacted 40 years ago! Please, please do not allow our state to continue to set such a bad example. If you hadn't noticed, we have infinite sun energy here and yet we continue to import excessive amounts of oil. It is a shame. We should be leading the world in the use of alternate sources of energy.

"he arguments against this bill hold little merit. The additioal cost is a few percent (if that) of a new home. Yes, it is being mandated just as sewage, water, and electricity are. The military has been installing solar water heaters in new homes for years here and our solar heater manufacturers and the economy haven't been adversely affected.

Don't miss this overdo opportunity.

Mahalo,

Art Mori 373-4386 571 Hao St Honolulu, HI 96821

From:Paul Campbell [campbellcenter@hawaiiantel.net]Sent:Monday, March 24, 2008 10:12 AMTo:FINTestimonySubject:Fw: Mandating Solar Water Heaters \_ Wednesday

Testimony: <u>FINtestimony@Capitol.hawaii.gov</u> COMMITTEE ON FINANCE Rep. Marcus R. Oshiro, Chair Rep. Marilyn B. Lee, Vice Chair

Wednesday, March 26, 2008 11:00 A.M. Conference Room 308

Aloha!

SB 644, SD3, HD2 Requires installation of solar thermal or demand water heaters in single-family residences constructed after 1/1/2010, reduces to 20% renewable energy tax credit for solar thermal systems in single-family residences constructed before 1/1/2010, and extends the credit at 15%, in certain conditions, to residences constructed after 1/1/2010.

Sierra Club Hawai'i, Moku Loa Group supports 35 percent tax credit for new and existing residential units and rebates from the Energy Efficiency Utility which will take over energy efficiency programs from HECO, MECO and HELCO in 2009.

Mahalo Nui Loa Paul Campbell, Chair Moku Loa Group Sierra Club Hawaii P O Box 1137 Hilo HI 96721

## House Committee on Finance Wednesday, March 26, 2008 11:00 a.m. State Capitol, Conference Room 308

Aloha Chair Yamashita and Members of the Committees

I **support** SB644SD3HD2, Relating to Energy Resources, that would require the installation of solar water heaters on newly constructed single-family homes, condos and townhouses.

Installing solar water heaters in new homes makes sense, both economically and for the environment. The additional costs to the new homeowner will be nominal when bundled into the mortgage and will be offset by the savings in electricity. At a minimum, the bill should mandate that all new homeowners be offered the option to install solar panels while it is being constructed. In 2007, California enacted the Million Solar Roofs bill that requires developers to offer the option.

Since the need for housing is a number one concern of Hawaii's residents, we may not be able to stop the building of new homes, but we should build them in an environmentally sensitive way.

Sincerely,

L. Freher

Lisa Fischer 4149 Sierra Dr. Honolulu HI 96816

From:Annacarmen [annacarmen@hawaii.rr.com]Sent:Monday, March 24, 2008 12:57 PMTo:FINTestimonySubject:3/26/2008 SB644 Agenda

I strongly support SB 644 SD3 HD2, mandating that new homes come equipped with solar water heaters. This would be an important first step in moving away from Hawaii's almost complete dependence on fossil fuels. It makes no sense at all with all the sunshine we get for Hawaii to be as dependent on fossil fuels as we are now. Hawaii is unique among the fifty states in that more than 90 percent of its energy comes from oil. That's higher than any other state! If an entire country such as Spain can mandate solar water heaters for all new homes, certainly our state can do so as well. Please take this step in fighting global warming.

Sincerely,

Ivona Xiezopolski 45-180 Mahalani Pl. 7 Kaneohe, HI 96744

From: Richard Pratt [pratt@hawaii.edu] Sent: Tuesday, March 25, 2008 11:41 AM

To: FINTestimony

Subject: Solar Water Heater Bill

March 25, 2008

Chair Honorable Marcus Oshiro, House Finance Committee

I support SB644SD3 HD2, Relating to Energy Resources, that would require the installation of solar water heaters on newly  $\Box$  constructed residential properties.  $\Box \Box$ 

Hawai'i has a history of public regarding legislation – public access to beaches, first public education system west of the  $\Box$ Mississippi, employer mandated health care, and more – and the addition of a mandate to install solar water heaters on new  $\Box$ homes should be added to the list. Solar energy is the one of the few natural resources that Hawaii can harness for energy, so  $\Box$ we should maximize its usage in order to reduce the State's dependency on oil.  $\Box$ 

No single measure will solve our energy issues, but this is a step in the right direction  $\Box$ 

Respectfully,□

Dick Pratt

4155 Sierra Drive

Honolulu, HI 96816

From:John Kim [john@3155alani.net]Sent:Monday, March 24, 2008 1:39 PMTo:FINTestimonyCc:Rep. Kirk CaldwellSubject:SB 644, S.D.3, H.D.2

I believe this bill is a mistake. For me, it represents another intrusion of government into the lives of citizens and is an attempt that could alter the functioning of our economy. If the government wants to encourage the use of alternative energy, it should encourage citizens in that direction rather than forcing the technology on contractors. Tax credits, rebates, lower electricity rates, etc are all within the purview of government. Insertion into the market place in the form of a mandate is not. People respond to the forces of the economy (the rapidly increasing popularity of hybrid automobiles in the face of record high prices for gasoline is but one example), and it should be the marketplace that dictates or instigates action on the part of the consumers. This proposed law is not the way to encourage our society to adopt alternative energy.

John Kim 3155 Alani Drive Honolulu, HI 988-3349

5B 644

From:Maury King [maury@mauryonmaui.com]Sent:Monday, March 24, 2008 4:05 PMTo:FINTestimonySubject:Solar, pls

Please pass any bill that comes before you that has anything to do with renewable energy, including the one about requiring solar hot water. The only thing I'm puzzled about is why wait until 2010 & why only the hot water & not require complete photovoltaic systems on everything new starting tomorrow?

I have submitted a Commentary to one of the Maui newspapers. It hasn't been published yet but maybe you will find it interesting. Thanks for reading it.

Funny how it all ties together. We talk about sustainability for Hawaii but continue to act in ways that so contradict that idea. If we continue on the path we've been on, which looks like greedy development and corporate profits at any cost, where do we think we'll end up? Any land that we rezone into residential zoning [Maui County Council just said 'yes' to a large new luxury development in South Maui called Wailea 670] takes that land out of production for growing food or biofuel feedstock or 'energy farms' (wind or solar) forever and when residences are built on the land there are that many more mouths here to feed and increased energy & water needs. Meaning the need for more ships delivering food, fuel and consumer goods to us. Winning in sustainability looks like working towards the need for less ships delivering stuff. In addition, as much of the planned development is luxury homes, that creates the need for more gardeners, house cleaners, restaurants and retail (& stuff) to serve the people that live there. Leading to the need for more energy, water and food needs. We are so far behind not only in our normal infrastructure like roads, water supplies and sewage treatment but we haven't even scratched the surface as far as renewable energy needs. Everyone knows we have the perfect climate for wind, solar, wave energy and geothermal, but where are we tapping into it in any big way? Government and business need a check up from the neck up if we are to survive. The business model looks to me like instead of 'profit at any cost' it should be 'people and Hawaii's survival first, profit second' -and make no mistake, there is a profit to be made in the Renewable World. What will it take to get us moving in this direction? I hope it can be done without a catastrophic wakeup call of some kind. What can we all do? It's an election year. Vote for change. Sign petitions. Write your elected officials. We need government transparency and individual participation to save us from a system that is rotted from the inside, or at least has never faced the need to rise above the status quo and shift the whole paradigm to face this huge challenge for our survival. If you don't like looking at wind turbines, you might consider that looking at wind turbines and solar farms and solar rooftops will mean we're winning in sustainability. Not looking at them will mean we've chosen business as usual over the chance to jump into the greatest opportunity that has ever faced us and that we lacked the political will and the courage to go there.

Maury King maury@mauryonmaui.com 808-874-5955

No virus found in this outgoing message. Checked by AVG. Version: 7.5.519 / Virus Database: 269.22.0/1341 - Release Date: 3/24/2008 3:03 PM

From: Michele Nihipali [nihipalim001@hawaii.rr.com]

Sent: Monday, March 24, 2008 3:29 PM

To: FINTestimony

Subject: RE: SB 644, SD3, AD2

Dear Committee Members:

I am in strong favor of SB 644 with the continuation of the 35% tax credit for new and existing residential units along with rebates from the Energy Efficiency Utility which will take over energy efficiency programs from HECO, MECO and HELCO in 2009. Thank you for your consideration,

Michele Nihipali 54-074 A Kam Hwy Hauula, HI 96717 293-1522

From:Zoe M Norcross [norcross@hawaii.edu]Sent:Monday, March 24, 2008 3:34 PMTo:FINTestimonySubject:SB644 SD3 HD2 Relating to Renewable Energy SUPPORT

SB644 SD3 HD2 Relating to Renewable Energy SUPPORT

Aloha Chair Oshiro, Vice Chair Lee and Members of the Committee;

SB 644 SD3 HD1 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

My husband and I are on a single income. When we built our small house, the architect talked us out of solar because he said it wasn't sunny enough where we live. So we installed a gas heater and spent a lot of money heating water for the next year or so. Being very concerned about our wasteful use of nonrenewable resources, however, we installed a solar water heater one and a half years ago and since then there have only been about 5 days when the water was not "hot" and we needed the backup electrical switch. And we even live in "rainy" Haiku on Maui! We were able to take advantage of all the programs in place to help out those who are lower income with getting solar hot water.

The fact that it only takes a few years to make back the money a solar water heater costs, alone, should be a no-brainer for supporting this bill. Solar water heaters save their owners money!! But the fact that it can tremendously reduce Hawaii's wasteful consumption of fossil fuels, is thousands of times more important to me than just saving money. It is your duty to help us take every measure we can to reduce our damage to our fragile planet and reduce our dangerous reliance on fossil fuels. Please support this bill.

Sincerely, Zoe Norcross-Nu'u 2415 Nehe Place Haiku, HI, 96708 norcross@hawaii.edu 808-572-9055

From: Respiratory & Environmental Disabilities Assoc of HI [redahi@hawaii.rr.com]

Sent: Tuesday, March 25, 2008 4:17 PM

To: FINTestimony

Subject: SB644 SD3 HD2 03-26-08, 11:00 am conf rm 308 House FIN

Conf Rm 308, 11AM

House FIN

Chairman Marcus Oshiro

SB644 SD3 HD2 Relating to Renewable Energy SUPPORT

Aloha Chairman Oshiro, Vice Chair Lee and Members of the Committee:

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a *small* percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped. Once a home is built and people move into them they baulk at the prospect of having to incur additional expenses. Even if the owners would like a solar water heater, it is usually placed on a "to do, later" list and is sometimes *never* done. This bill is sensible and necessary. Please do all possible to pass.

Thank you for your time,

Bobby McClintock, Honolulu, HI

From:Jeff Sacher [jsacher@kona.net]Sent:Monday, March 24, 2008 12:33 PMTo:FINTestimonySubject:SB644 SD3 HD2

COMMITTEE ON FINANCE Rep. Marcus R. Oshiro, Chair Rep. Marilyn B. Lee, Vice Chair

RE: SB644 SD3 HD2 DATE: Wednesday, March 26, 2008 TIME: 11:00 A.M. PLACE: Conference Room 308 State Capitol 415 South Beretania Street

Dear Representatives Oshiro and Lee:

Please pass SB644. We need to move toward sustainability right away and this bill is instrumental in moving us in that direction.

Jeff Sacher Kawaihae, Big Island 808-882-1692

From:DRJLAM@aol.comSent:Monday, March 24, 2008 12:25 PMTo:FINTestimony

Subject: SB644 SD3 HD2 Testrimony for Solar Heating Bill

# SB644 SD3 HD2 Wednesday, 03-26-08, at 11:00 am in conference room 308

Senate Chairperson Marcus Oshiro and Committee Members,

I am writing in support of this solar heating bill. You will be helping Hawaii take a big step in the right direction. This will make a big difference in our fight against higher oil prices and inflation. Thank you for your attention.

Sincerely,

Jeremy Lam, MD 2230 Kamehameha Avenue Honolulu, HI 96822

Create a Home Theater Like the Pros. Watch the video on AOL Home.

From:	Una Greenaway [una@hawaii.rr.com]
3ent:	Monday, March 24, 2008 12:44 PM
To:	FINTestimony
Subject:	SB644 SD3 HD2 IN STRONG SUPPORT

Date: Wednesday, March 26, 2008 Time: 11:00 a.m. Room: 308

SB644 SD3 HD2 Relating to Renewable Energy SUPPORT

Aloha Chair Oshiro and Vice Chair Lee and Members of the Committee,

Please pass this very important bill, that will seriously reduce the amount of fossil fuels being used in our state. We are currently looking at implementing the 2050 sustainability plan, and this is an easy first step toward energy independence. We currently have a solar water heater on our home, and realize how much easier it would have been if the unit were included in the initial price of my home and my monthly mortgage payment. Mahalo Una Greenaway

Kona

rom: ∋ent: To: Subject: Pam Lightfoot Burrell [good.designworks@hawaiiantel.net] Monday, March 24, 2008 3:49 PM FINTestimony SB644 SD3 HD2, 2-26-08

Chairman Marcus Oshiro,

By making this simple, single bill a reality you will have done an amazing service not only to the citizens of this island by reducing their electric bill... you will do much to help the island become one step closer to being sustainable. This one step will eliminate the need of using 30-40% of our island electrical needs. Mostly supplied by the use of oil.

I feel the tax credit should be some where in the range of 35% to keep the incentives high. Let's do something positive for our island!

Please, for the health of our environment, mandate Solar!

Thank you for your time and consideration.

Pamela Lightfoot Burrell Kaua'i

586-6201 Marcus Oshiro

From:	Lance Hotter (holter@maui.net)
Sent:	Tuesday, March 25, 2008 1:16 PM
To:	'FINtestimony@capitol.hawaii.gov'
Cc:	'repmoshiro@capitol.hawaii.gov'; 'Sen. Gary Hooser'
Subject:	In support of SB644 SD3 HD2 Solar Bill

Importance: High

March 25, 2008 Chair Marcus Oshiro FINANCE COMMITTEE SB644SD3HD2

I am in favor of 'the solar bill SB644SD3HD2. Yesterday I received my new electric Bill. My cottage has solar hot water and it's bill is \$100.11, my home doesn't because it needed work before I could install it, it's electric bill is \$282.53. WOW WHAT A SAVINGS! Installing solar should be a mandatory effort all over Hawaii and those that stand in the way should get their heads out of the sand and pay attention. Hawaii is in big trouble if we don't make ourselves energy efficient, time is wasting let's do it and do it now. Don't let special interests derail an important change in the way we get our energy and savings from oil imports. Be sustainable support SB644 SD3 HD2. I am a Hawaii Licensed Building and Plumbing contractor and believe having installed solar will make homes more desirable to purchase and that present plumbing codes and inspections will verify that the installations are done properly. The best time to install solar is during construction not after. It's also cheaper to install solar while the structure is under construction. It's more expensive to retrofit.

Lance Holter Chairman, Maui Democratic party tele 579-9442 Box 790656 Pala, HI 96779

From:Mary Ikagawa [mikagawa@hawaii.edu]Sent:Tuesday, March 25, 2008 4:52 PMTo:FINTestimonySubject:IN SUPPORT OF Senate Bill 644 SD3 HD2

March 25, 2008

TO: SENATE COMMITTEE ON FINANCE

FROM: Mary Ikagawa, Kailua, Oahu

IN SUPPORT OF Senate Bill 644 SD3 HD2, House Draft 2 – RELATING TO ENERGY RESOURCES

Scheduled for Wednesday, March 26, 2008, 11:00 A.M., Conference Room 308

Aloha Senator Oshiro and members of the Committee,

It is in our best interest to take proactive steps toward energy independence, and not rely solely on market forces, which often favor inertia until the last bit of profit is extracted from an existing system. For many reasons, delay of this type will be quite costly into the future, rather than cost effective. Please support SB 644 SD3 HD2.

Mary Ikagawa

From:Elizabeth Cole [bcole47@hawaiiantel.net]Sent:Monday, March 24, 2008 7:05 AMTo:FINTestimonySubject:SB 644, SB 644 Madatory Solar Water Heating Bill, SD3, HD2

I strongly support a 35 percent tax credit for new and existing residential units and rebates from the Energy Efficiency Utility which will take over energy efficiency programs from HECO, MECO and HELCO in 2009. Please make solar hot water units mandatory in new homes and create as much incentive as possible. Elizabeth Cole P. O. Box 777 Honokaa, HI 96727

To: Hawaii State Legislators

RE: SB644 - Renewable Energy

Dear Legislators,

Please leave the Renewable Energy Tax Cradet at 35%.

Mankyon. This is critically important to Hawaii's efforts in moving toward energy self sufficiency. In the long run, it will save us all money.

Aphalo,

Mary Muthall 1210-B CROSSLEY RD. KAPAA, Hi. 96746-9753